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EXAMINER

PIZIALI, JEFFREY J

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2629

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/942,837	Applicant(s) GETTEMY ET AL.	
	Examiner Jeff Piziali	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2009 and 06 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 69-98 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 69-98 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of ***Invention I (claims 69-98)*** in the reply filed on *21 December 2009* is acknowledged.
2. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character not mentioned in the description: "**200**" (e.g., see *Figure 2*).

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either

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"Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. *Claims 69-78* are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. *Claims 69-78* are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "***a single-piece cover***" (e.g., *claim 69, line 10*) and "***said single-piece cover further comprises a flexible thermoplastic film and a supporting structure coupled to said flexible thermoplastic film***" (e.g., *claim 70, lines 1-3*).

The above claimed subject matter appears to contradict itself.

It would be unclear to one having ordinary skill in the art how a "*single-piece cover*" can comprise at least *two* distinct portions (*thermoplastic film + supporting structure*).

Is the claimed invention directed to a *single-piece cover* or a *two-piece cover*?

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7. The remaining claims are rejected under 35 U.S.C. 112, second paragraph, as being dependent upon rejected base claims.

8. The claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

As a courtesy to the Applicant, the examiner has attempted to also make rejections over prior art -- based on the examiner's best guess interpretations of the invention that the Applicant is intending to claim.

However, the indefinite nature of the claimed subject matter naturally hinders the Office's ability to search and examine the application.

Any instantly distinguishing features and subject matter that the Applicant considers to be absent from the cited prior art is more than likely a result of the indefinite nature of the claims.

The Applicant is respectfully requested to correct the indefinite nature of the claims, which should going forward result in a more precise search and examination.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. *Claims 69, 70, 73, 74, 76-80, 83, 84, 86-90, 93, 94, and 96-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Adair (US 5,812,188 A)** in view of **Logan et al (US 4,821,029 A)** and the instant application's **Admitted Prior Art (APA)**.*

Please note: Claim order has been rearranged in the Office action to better reflect the order of specificity of the pending claims (*going from broadest to more specific claim language*).

Regarding claim 79, **Adair** discloses a portable electronic device [*e.g., Fig. 4*] comprising:

- a housing comprising a first cover [*e.g., Fig. 4: 59*];
- a display device [*e.g., Fig. 4: 54*] disposed in said housing,
- wherein said display device comprises a display surface [*e.g., Fig. 4: top surface of 54*]
and a first side [*e.g., Fig. 4: left-side surface of 54*],
- wherein said display surface and said first side are not planar;
- a digitizer [*e.g., Fig. 4: 56*] disposed above said display device and operable to provide an input to said portable electronic device in response to a deformation of said digitizer; and

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wherein said first cover is disposed above said digitizer and operable to enable said deformation of said digitizer in response to a contact with said first cover,

wherein a first portion [*e.g., Fig. 4: top portion of 59*] of said first cover overlaps said display surface,

wherein a second portion [*e.g., Fig. 4: left-side portion of 59*] of said first cover overlaps said first side of said display device, and

wherein said first cover comprises at least one bend [*e.g., Fig. 4: 59 at 42*] joining said first and second portions (*see the entire document, including Column 5, Line 59 - Column 6, Line 37*).

Should it be shown that **Adair** discloses the subject matter of *a digitizer disposed above said display device*, as instantly claimed, with insufficient specificity:

Logan discloses a portable electronic device [*e.g., Fig. 1*] comprising:

a display device [*e.g., Fig. 1: 1'*]; and

a digitizer [*e.g., Fig. 1''*] disposed above said display device and operable to provide an input to said portable electronic device in response to a deformation of said digitizer (*see the entire document, including Column 3, Lines 30-60*).

Adair and **Logan** are analogous art, because they are from the shared inventive field of touch screen devices.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to apply **Logan's** digitizer arrangement and control techniques to **Adair's** device, so

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as to provide a flexible touch screen process and system that incorporates, together with the appropriate processing, a self-sufficiency of control to the touch screen.

Should it be shown that even **Logan** discloses the subject matter of *a digitizer disposed above said display device*, as instantly claimed, with insufficient specificity:

The **APA** discloses a portable electronic device [*e.g., Fig. 1*] comprising:

- a housing comprising a first cover [*e.g., Fig. 1: 105, 110*];
- a display device [*e.g., Fig. 1: 140*] disposed in said housing,
- wherein said display device comprises a display surface [*e.g., Fig. 1: top surface of 140*]
- and a first side [*e.g., Fig. 1: left-side surface of 140*],
- wherein said display surface and said first side are not planar;
- a digitizer [*e.g., Fig. 1: 120, 130, 170*] disposed above said display device and operable to provide an input to said portable electronic device in response to a deformation of said digitizer; and
- wherein said first cover is disposed above said digitizer and operable to enable said deformation of said digitizer in response to a contact with said first cover,
- wherein a first portion [*e.g., Fig. 1: 110*] of said first cover overlaps said display surface,
- wherein a second portion [*e.g., Fig. 1: 105*] of said first cover overlaps said first side of said display device, and
- wherein said first cover comprises at least one bend [*e.g., Fig. 1: 105's bend*] joining said first and second portions (*see the entire document, including Fig. 2; Page 1, Line 11 - Page 5, Line 21*).

Adair, Logan, and the **APA** are analogous art, because they are from the shared inventive field of touch screen devices.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to apply the **APA's** digitizer arrangement and control techniques to **Adair's** device, so as to make use of a typical, well known, and commonly understood resistive digitizer mechanism.

Regarding claim 80, **Adair** discloses said first cover further comprises a flexible thermoplastic film [*e.g.*, *Fig. 4: 59*] and a supporting structure [*e.g.*, *Fig. 4: 42*] coupled to said flexible thermoplastic film (*e.g.*, *see Column 5, Line 59 - Column 6, Line 37*).

Regarding claim 83, **Adair** discloses said first cover further comprises a border [*e.g.*, *Fig. 4: 59*] (*e.g.*, *see Column 5, Line 59 - Column 6, Line 37*).

Regarding claim 84, the **APA** discloses said digitizer comprises electrical traces [*e.g.*, *Fig. 1; 180*] and circuits [*e.g.*, *Fig. 1; 160*] along a periphery, and wherein a border [*e.g.*, *Fig. 1; 105*] overlaps said electrical traces and circuits (*e.g.*, *see Fig. 2; Page 1, Line 11 - Page 5, Line 21*).

Regarding claim 86, **Adair** discloses said housing further comprises

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a second cover [e.g., *Fig. 4: 44*], and

wherein said first cover and said second cover enclose said display device and said digitizer (e.g., *see Column 5, Line 59 - Column 6, Line 37*).

Regarding claim 87, **Adair** discloses said first cover comprises at least one transparent portion (e.g., *see Column 5, Line 59 - Column 6, Line 37*).

Regarding claim 88, the **APA** discloses said digitizer comprises a resistive digitizer (e.g., *see Figs. 1, 2; Page 1, Line 11 - Page 5, Line 21*).

Regarding claim 89, this claim is rejected by the reasoning applied in rejecting claim 79; furthermore, **Logan** discloses a processor [e.g., *Fig. 1: 5*]; and a memory [e.g., *Fig. 1: 5*] (e.g., *see Column 3, Lines 30-60*).

Regarding claim 90, this claim is rejected by the reasoning applied in rejecting claim 80.

Regarding claim 93, this claim is rejected by the reasoning applied in rejecting claim 83.

Regarding claim 94, this claim is rejected by the reasoning applied in rejecting claim 84.

Regarding claim 96, this claim is rejected by the reasoning applied in rejecting claim 86.

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Regarding claim 97, this claim is rejected by the reasoning applied in rejecting claim 87.

Regarding claim 98, this claim is rejected by the reasoning applied in rejecting claim 88.

Regarding claim 69, this claim is rejected by the reasoning applied in rejecting claims 79 and 89; furthermore, *Adair* discloses a single-piece cover [e.g., *Fig. 4: 59*] (e.g., see *Column 5, Line 59 - Column 6, Line 37*).

Regarding claim 70, this claim is rejected by the reasoning applied in rejecting claim 80.

Regarding claim 73, this claim is rejected by the reasoning applied in rejecting claim 83.

Regarding claim 74, this claim is rejected by the reasoning applied in rejecting claim 84.

Regarding claim 76, this claim is rejected by the reasoning applied in rejecting claim 86.

Regarding claim 77, this claim is rejected by the reasoning applied in rejecting claim 87.

Regarding claim 78, this claim is rejected by the reasoning applied in rejecting claim 88.

12. Claims 71, 72, 81, 82, 91, and 92 rejected under 35 U.S.C. 103(a) as being unpatentable over *Adair (US 5,812,188 A)*, *Logan et al (US 4,821,029 A)*, and the instant application's

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Admitted Prior Art (APA) as applied respectively to *claims 69, 79, and 89* above, and further in view of **Conroy et al (US 5,686,705 A)**.

Regarding claim 81, **Adair, Logan**, and the **APA** do not appear to expressly disclose a *conductive polymer*, as instantly claimed.

However, the **AAPA** discloses said digitizer comprises a conductive film made of indium tin oxide [*e.g., Fig. 1; 120*] disposed above a digitizing element [*e.g., Fig. 1; 130*] (*e.g., see Fig. 2; Page 3, Line 11 - Page 5, Line 11*).

Moreover, **Conroy** discloses substituting conductive digitizer wires with a conductive polymer composite, such as conductive plastic (*see the entire document, including Column 3, Lines 9-30, Column 4, Lines 21-32, Column 5, Line 55 - Column 6, Line 10, and Column 8, Lines 37-40*).

Adair, Logan, the **APA**, and **Conroy** are analogous art, because they are from the shared inventive field of touch screen devices.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Conroy's** conductive polymer in place of the **AAPA's** conductive film, so as to provide a rugged and reliable electronic device.

Regarding claim 82, the **AAPA** discloses said digitizer further comprises a plurality of electrodes [*e.g., Fig. 1; 160*] and traces [*e.g., Fig. 1; 180*] operable to register a point of contact when said conductor makes contact with said digitizing element (*e.g., Page 3, Line 11 - Page 5, Line 11*).

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Regarding claim 91, this claim is rejected by the reasoning applied in rejecting claim 81.

Regarding claim 92, this claim is rejected by the reasoning applied in rejecting claim 82.

Regarding claim 71, this claim is rejected by the reasoning applied in rejecting claim 81.

Regarding claim 72, this claim is rejected by the reasoning applied in rejecting claim 82.

13. *Claims 75, 85, and 95* are rejected under 35 U.S.C. 103(a) as being unpatentable over *Adair (US 5,812,188 A)*, *Logan et al (US 4,821,029 A)*, and the instant application's *Admitted Prior Art (APA)* as applied respectively to *claims 69, 79, and 89* above, and further in view of *Barkan et al (US 3,757,322 A)*.

Regarding claim 85, *Adair* discloses a plurality of buttons [*e.g., Fig. 4: 56*] (*e.g., see Column 5, Line 59 - Column 6, Line 37*).

And the *APA* discloses said cover comprises indentations [*e.g., Fig. 1; 150, icon sheet*] to indicate button functions (*e.g., see Page 3, Line 11 - Page 5, Line 11*).

However, should it be shown that *Adair*, *Logan*, and the *APA* do not disclose *button indentations*, as instantly claimed:

Barkan discloses a plurality of buttons [*e.g., Fig. 3: 46*]; and

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wherein a first cover [*e.g.*, *Fig. 3: 58*] comprises indentations [*e.g.*, *Fig. 3: formed between 60, 62*],

wherein each of said indentations corresponds to a respective button of said plurality of buttons (*see the entire document, including Fig. 5; Column 14, Line 65 - Column 18, Line 65*).

Adair, Logan, the *APA*, and *Barkan* are analogous art, because they are from the shared inventive field of touch screen devices.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use *Barkan's* button indentations to correspond with *Adair's* buttons, so as to provide a tactile feel to the user for distinguishing between adjacent buttons.

Regarding claim 95, this claim is rejected by the reasoning applied in rejecting claim 85.

Regarding claim 75, this claim is rejected by the reasoning applied in rejecting claim 85.

Response to Arguments

14. Applicant's arguments filed on 6 January 2009 have been fully considered but they are not persuasive.

The Applicant contends, "*Figure 1 fails to teach or suggest the limitations of 'wherein said single-piece cover comprises at least one bend joining said first and second portions and*

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further for enabling said overlapping of said display surface and said first side of said display' and 'wherein said display surface and said first side are not planar'...

***Figure 1** is directed to a cover with more than one portion. For example, **Figure 1** shows touch screen assembly 100 with outer protective film 110 and supporting structure 105 (lines 11-18 of page 3 of the present application). Accordingly, **Figure 1** shows a cover with more than one portion instead of a single-piece cover as claimed...*

***Conroy**, either alone or in combination with **Figure 1** and/or **Suzuki**, fails to teach or suggest the limitations of 'wherein said single-piece cover comprises at least one bend joining said first and second portions and further for enabling said overlapping of said display surface and said first side of said display' and 'wherein said display surface and said first side are not planar' as recited" (see Pages 12-14 of the Response filed on 6 January 2009). However, the examiner respectfully disagrees.*

Firstly, it is respectfully noted that only pending claims 69-78 recite the "*single-piece cover*" subject matter argued by the Applicant as distinguishing over the prior art.

The remaining claims 79-98 do not include the argued "*single-piece cover*" subject matter -- instead they merely recite "*a first cover*." No mention is ever made that such "*a first cover*" is required to be a "*single-piece cover*."

With all due respect, the examiner can locate no arguments on the record whatsoever by the Applicant contending that the subject matter of claims 79-98 overcomes the previously cited prior art.

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Secondly, it is further respectfully noted that claim 70 recites the following subject matter: "**said single-piece cover further comprises a flexible thermoplastic film and a supporting structure coupled to said flexible thermoplastic film.**"

Therefore, the Applicant's own "single-piece cover" has "more than one portion."

Figure 3 of the instant application clearly illustrates the *flexible thermoplastic film (310)* and the *supporting structure (360)* being two distinct elements/portions.

In light of such "single-piece cover" claim construction, it seems fully appropriate and reasonable to say that one having ordinary skill in the art at the time of invention would understand (*Prior Art*) Figure 1 as illustrating a single-piece cover comprising a *flexible thermoplastic film (110)* and a *supporting structure (105)* coupled to said flexible thermoplastic film.

Thirdly, *Claims 69-78* are rejected under 35 U.S.C. 112, second paragraph, as being indefinite, due to the contradictory nature of the claims and the Applicant's own arguments.

Applicant's arguments with respect to *claims 69-98* have been considered but are moot in view of the new ground(s) of rejection.

By such reasoning, rejection of the claims is deemed necessary, proper, and thereby maintained at this time.

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Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Piziali/
Primary Examiner, Art Unit 2629
27 March 2010